DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-020916 Address: 333 Burma Road **Date Inspected:** 22-Feb-2011

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes No Qiu Wen, An Qing Xiang **Inspected CWI report:** Yes No N/A **Rod Oven in Use:** Yes No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** OBG

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance (QA) Inspector Umesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

BAY 14, OBG 14W (NWIT # 08364)

This QA inspector performed Ultrasonic Testing (UT) of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA inspector generated UT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows.

SEG3020D-035, 032

This Quality Assurance (QA) Inspector observed the following work in progress:

Bay 14

OBG Seg 14W:

Repair welding of weld joint no: SEG3020BB-028 [Bottom Plate (BP) 3088A to Vertical Shear Plate SA3446A, Complete Joint Penetration (CJP) weld in between panel point (PP) 125~126]. The welder is identified as 067942

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and was observed welding in the 2G position. Welding process was identified as Shielded Metal Arc Welding (SMAW). AB/F QA was identified as Mr. Xiao Jun Peng. The welding variables recorded by this QA appeared to comply with WPS: 345-SMAW-2G(2F)-FCM-Repair-1. Repair welding was done as per Critical Welding Repair (CWR) Report: B-CWR 2793 Rev-0.

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3020BB-112 (Anchor Plate (AP) 3032A to Vertical Shear Plate SA3446A, CJP weld at PP126). The welder is identified as 066695 and was observed welding in the 3G position. ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with WPS: B-T-2233-ESAB.

The Shielded Metal Arc Welding (SMAW) process on weld joint no: SEG3020U-587 (Anchor Plate (AP) 3032A to Longitudinal Diaphragm (LD) 3049A, CJP weld at PP126). The welder is identified as 045175 and was observed welding in the 3G position. ZPMC CWI was identified as Mr. An Qing Xiang. The welding variables recorded by QC appeared to comply with WPS: B-T-2233-ESAB.

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3020V-043, 045 (Anchorage Plate (AP) 3017A/3018A to Floor Beam (FB) 3316A, Fillet weld at PP125). The welder is identified as 201215 and was observed welding in the 2F position. ZPMC QC was identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with WPS: B-T-2132-ESAB.

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3020W-029, 031 (Anchorage Plate (AP) 3020A/3021A to Floor Beam (FB) 3317A, Fillet weld at PP125). The welder is identified as 201215 and was observed welding in the 2F position. ZPMC QC was identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with WPS: B-T-2132-ESAB.

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3020W-021, 023 (Anchorage Plate (AP) 3018A/3019A to Floor Beam (FB) 3316A, Fillet weld at PP125). The welder is identified as 201215 and was observed welding in the 2F position. ZPMC QC was identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with WPS: B-T-2132-ESAB.

The Submerged Arc Welding (SAW) process on weld joint no: SEG3020AP-002 (Anchorage Plate (AP) 3019A to Anchorage Plate (AP) 3020A, CJP weld in between Panel Point PP125~PP127). The welder is identified as 045265 and was observed welding in the 1G position. ZPMC QC was identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with WPS: B-T-223(2)1T-ESAB-1.

The Shielded Metal Arc Welding (SMAW) process on weld joint no: SEG3020R-023, 024 (Anchorage Plate (AP) 3020A to Floor Beam (FB) 3321A, Fillet weld at Panel Point PP126). The welder is identified as 067829 and was observed welding in the 4F position. ZPMC QC was identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with WPS: B-P-2114-FCM-1.

The Shielded Metal Arc Welding (SMAW) process on weld joint no: SEG3020M-022, 028 (Anchorage Plate (AP) 3020A/3021A to Floor Beam 3329A, Fillet weld at Panel Point PP127). The welder is identified as 069896 and was observed welding in the 4F position. ZPMC QC was identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with WPS: B-P-2114-FCM-1.

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The Shielded Metal Arc Welding (SMAW) process on weld joint no: SEG3020P-023, 024 (Anchorage Plate (AP) 3020A to Floor Beam 3319A, Fillet weld at Panel Point PP126.5). The welder is identified as 067765 and was observed welding in the 4F position. ZPMC QC was identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with WPS: B-P-2114-FCM-1.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang: 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Gaikwad,Umesh	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer